

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1 1. (Currently Amended) A computer program product including program code,
2 when executed on a computer system, for providing an interface between a calling application
3 and at least one callable application, said program code representing a computer program which
4 implements at least two controllers which cooperate with each other and are at different
5 hierarchical levels, wherein said controllers are instances of a generic controller, wherein the
6 generic controller is a class, and the at least two controllers are subclasses inherited from the
7 generic controller class.

1 2. (Currently Amended) The computer program product of claim 1, wherein the
2 computer program is written in an object-oriented programming language, ~~and the generic~~
3 ~~controller is a class, and the at least two controllers are subclasses inherited from the generic~~
4 ~~controller class.~~

1 3. (Original) The computer program product of claim 1, wherein the calling
2 application is a computerized business application or an online request handling application.

1 4. (Original) The computer program product of claim 1, wherein the at least one
2 callable application is a transaction-tax service application.

1 5. (Original) The computer program product of claim 4, wherein the at least one
2 transaction-tax service application is a transaction-tax calculation application or a transaction-tax
3 logging application.

1 6. (Original) The computer program product of claim 4, providing an interface to at
2 least two transaction-tax service applications, said transaction-tax service applications
3 comprising at least two different transaction-tax calculation applications.

1 7. (Original) The computer program product of claim 1, wherein the controller at
2 the higher hierarchical level is arranged for controlling an overall logic processing of the
3 interface, and the controller or controllers at the lower hierarchical level is or are arranged for
4 controlling a processing of the interface specific to the callable application or applications with
5 which the respective controller is associated.

1 8. (Currently Amended) ~~The computer program product of claim 7, A computer~~
2 program product including program code, when executed on a computer system, for providing an
3 interface between a calling application and at least one callable application, said program code
4 representing a computer program which implements at least two controllers which cooperate
5 with each other and are at different hierarchical levels, wherein said controllers are instances of a
6 generic controller,

7 wherein the controller at the higher hierarchical level is arranged for controlling
8 an overall logic processing of the interface, and the controller or controllers at the lower
9 hierarchical level is or are arranged for controlling a processing of the interface specific to the
10 callable application or applications with which the respective controller is associated,

11 wherein the controller at the higher hierarchical level is arranged for receiving an
12 input request from the calling application and sending an output request to the controller at the
13 lower hierarchical level, and receiving an output response from the controller at the lower
14 hierarchical level as an input response, the controller at the lower hierarchical level is arranged
15 for receiving the output request of the controller at the higher hierarchical level as an input
16 request, sending an output request to the callable application or one or more of the callable
17 applications to which it is associated, receiving an input response from the callable application or
18 applications, and sending an output response to the controller at the higher hierarchical level.

1 9. (Original) The computer program product of claim 8, providing an interface to at
2 least two callable applications of a same type, wherein the specific processing for which the
3 controller at the lower hierarchical level and assigned to the at least two callable applications is
4 arranged comprises deciding to which one of the at least two callable applications the output
5 request is sent.

1 10. (Original) The computer program product of claim 9, wherein the at least two
2 callable applications of the same type are transaction-tax calculation applications.

1 11. (Original) The computer program product of claim 1, wherein the controllers
2 comprise at least one of the following components:

- 3 an input/output module;
- 4 an input parser;
- 5 a validation engine;
- 6 a universal state machine;
- 7 a knowledge base module;
- 8 a process slip module;
- 9 a process carrier.

1 12. – 14. (Cancelled)

1 15. (Original) A software-implemented method of interfacing a calling application
2 and at least one callable application, comprising:
3 using at least two software-implemented controllers at different hierarchical
4 levels;
5 performing, both with the controllers at the higher and lower hierarchical levels, a
6 sequence of steps comprising:
7 upon receipt of an input request from an higher hierarchical level element,
8 which is the calling application or a controller at a higher hierarchical level, performing input
9 request handling,
10 sending at least one output request to at least one lower hierarchical level
11 element, which is a controller at a lower hierarchical level or the at least one callable application,
12 receiving an input response to the at least one output request from the
13 lower hierarchical level element,
14 sending an output response to the higher hierarchical level element,
15 wherein the output request of the controller at the higher hierarchical level is the
16 input request to the controller at the lower hierarchical level, and the output response of the
17 controller at the lower hierarchical level is the input response to the controller at the higher
18 hierarchical level.

1 16. (Original) The method of claim 15, wherein the at least one callable application
2 is a transaction-tax service application.

1 17. (Original) The method of claim 15, wherein the at least one transaction-tax
2 service application is a transaction-tax calculation application or a transaction-tax logging
3 application.

1 18. (Currently Amended) A method of implementing a programmed interface
2 between a calling application and at least one callable application, comprising:
3 coding at least two controllers at different hierarchical levels, wherein said
4 controllers are instances of a generic controller, wherein the generic controller is a class, and the
5 at least two controllers are subclasses inherited from the generic controller class.

1 19. (Currently Amended) The method of claim 18, wherein the controllers are coded
2 in an object-oriented programming language, ~~and the generic controller is a class, and the at least~~
3 ~~two controllers are subclasses inherited from the generic controller class.~~

1 20. (Original) The method of claim 18, wherein the at least one callable application
2 is a transaction-tax service application.

1 21. (Original) The method of claim 20, wherein the at least one transaction-tax
2 service application is a transaction-tax calculation application or a transaction-tax logging
3 application.

1 22. (Original) The method of claim 18, wherein the controller at the higher
2 hierarchical level is arranged for controlling an overall logic processing of the interface, and the
3 controller or controllers at the lower hierarchical level is or are arranged for controlling a
4 processing of the interface specific to the callable application or applications with which the
5 respective controller is associated.

1 23. (Original) The method of claim 22, wherein
2 the controller at the higher hierarchical level is arranged for receiving an input
3 request from the calling application and sending an output request to the controller at the lower
4 hierarchical level, and receiving an output response from the controller at the lower hierarchical
5 level as an input response,
6 the controller at the lower hierarchical level is arranged for receiving the output
7 request of the controller at the higher hierarchical level as an input request, sending an output
8 request to the callable application or one or more of the callable applications to which it is
9 associated, receiving an input response from the callable application or applications, and sending
10 an output response to the controller at the higher hierarchical level.

1 24. (Original) The method of claim 23, wherein the interface is arranged to provide
2 an interface to at least two callable applications of a same type, wherein the specific processing
3 for which the controller at the lower hierarchical level and assigned to the at least two callable
4 applications is arranged comprises deciding to which one of the at least two callable applications
5 the output request is sent.

1 25. (Original) The method of claim 24, wherein the at least two callable applications
2 of the same type are transaction-tax calculation applications.

1 26. (Original) The method of claim 18, wherein the controllers are implemented so as
2 to comprise at least one of the following components:
3 an input/output module;
4 an input parser;
5 a validation engine;
6 a universal state machine;
7 a knowledge base module;
8 a process slip module;
9 a process carrier.

1 27. (Currently Amended) A computer program product including program code,
2 when executed on a computer system, for providing an interface between a calling application
3 and at least two transaction-tax calculation applications,
4 said interface including at least two controllers that cooperate with each other and
5 are at different hierarchical levels, wherein the controllers are instances of a generic controller,
6 and wherein the generic controller is a class, and the at least two controllers are subclasses
7 inherited from the generic controller class,
8 said interface is arranged to carry out, when called by the calling application, at
9 least one of:
10 - selecting one of the transaction-tax calculation applications depending on
11 a transaction attribute, calling the selected transaction-tax calculation application and receiving a
12 response from the called transaction-tax calculation application; and
13 - calling at least two of the transaction-tax calculation applications,
14 comparing the responses returned by them.

1 28. (Original) The computer program product of claim 27, wherein the interface is
2 further arranged to return a response to the calling application based on the response from the
3 called transaction-tax calculation application or, if at least two transaction-tax calculation
4 applications have been called, based on the comparison.

1 29. (Original) The computer program product of claim 27, wherein the interface is
2 further arranged to direct a response for logging purposes to a logging controller based on the
3 response from the called transaction-tax calculation application or, if at least two transaction-tax
4 calculation applications have been called, based on the comparison.

1 30. (Currently Amended) A software-implemented method of interfacing a calling
2 application and at least two transaction-tax calculation applications,
3 comprising, when a call is received from the calling application, at least one of:
4 - selecting one of the transaction-tax calculation applications depending on
5 a transaction attribute, calling the selected transaction-tax calculation application and receiving a
6 response from the called transaction-tax calculation application; and
7 - calling at least two of the transaction-tax calculation applications and
8 comparing the responses returned by them,
9 wherein the interfacing is provided by an interface including at least two
10 controllers that cooperate with each other and are at different hierarchical levels, wherein the
11 controllers are instances of a generic controller, and wherein the generic controller is a class, and
12 the at least two controllers are subclasses inherited from the generic controller class.